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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,507	10/08/1999	RYUICHI SHIOHARA	Q56144	3387

7590 07/26/2004
SUGHRUE MION ZINN MACPEAK AND SEAS PLLC
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WASHINGTON, DC 200373202

EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2615

15

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,507

Applicant(s)

SHIOHARA ET AL.

Examiner

Nhan T. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004 and 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 & 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 & 2 recite the limitation "the external recording medium" throughout the claims. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarbadhikari et al (US 5,477,264).

Regarding claim 11, Sarbadhikari discloses a digital camera for recording image data by converting an image pickup light photoelectrically (Fig. 2), comprising:

external program reception means (camera circuitry shown in Fig. 2) with a program installing function, for waiting (due to checking for available programs; Fig. 3) for a program transmitting command from an external recording medium (memory card 24), receiving program transmitting command from the external recording medium (command to user to select available programs at input section 21; Fig. 3), transmitting a request-to-send program command (user's selection command for downloading one of many programs) to the external recording medium, receiving a program recorded on the external recording medium, which is connected thereto exchangeably, and storing the program into a recording medium (RAMs 28, 31) provided in the digital camera; and execution control means (processors 20, 22) for reading the program from the recording medium at a desired time to execute the read out program (*see Figs. 2 & 3; col. 9, lines 1-21; col. 7, lines 50-67 and col. 6, lines 30-32*).

Regarding claim 12, see the analysis of claim 11 and **col. 11, lines 14-42** for the same process with enhancement programs being uploaded by the computer to an electrical erasable firmware memory 36 in the digital camera using a **cable** instead of the removable memory card.

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Regarding claims 1 & 2, see the analysis of claims 11 & 12, respectively. Furthermore, as to "selecting program installing at the digital camera," the limitation is met by automatically checking step by the camera shown in Fig. 3 and col. 9, lines 1-21.

4. Claims 3-8, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbadhikari et al (US 5,477,264) in view of Ogawa et al (JP 09-046577).

Regarding claims 13 & 15, Sarbadhikari does not teach program deleting means for deleting a desired program from the recording medium as required in claim 13 and that the program is program for generating print image data and print data transmitting means for transmitting the print image data generated by executing the program to a printing device as required in claim 15.

Ogawa teaches an image pickup equipment (40) that downloads a printer driver program from an external device (41). By sending the captured image to a printer (42) using the downloaded printer driver, it becomes possible to perform direct printing of image to the printer from the image pickup equipment (see Figs. 1 & 4; page 3, paragraph [0023]). In addition, Ogawa also suggests that an elimination of the downloaded program in the camera is possible (see paragraph [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art to recognize the advantageous teachings of Ogawa to improve the camera system in Sarbadhikari by including a printer driver program that is available for downloading from an external device to the camera for printing execution so that direct printing of image to the printer from the camera becomes

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possible. Furthermore, such a printer driver program would be deleted at any time to save memory space.

Regarding claims 3, 4 & 14, see the analysis of claim 13.

Regarding claims 5, 6 & 16, see the analysis of claim 15.

Regarding claim 17, also see the analysis of claim 15 for the communication program being *a printer driver program* for the camera to communicate with the printer. Although the communication between the camera and the printer taught by Ogawa is a wireless communication program instead of a wired communication program, an Official Notice is taken that it is well known in the art that communication between a camera and a printer can be configured in wired or wireless fashion.

Therefore, it would have been obvious to one of ordinary skill in the art to configure the camera to communicate with a printer through communication line utilizing a corresponding printer driver program as an obvious variant over the wireless configuration.

Regarding claims 7, 8 & 18, see the analysis of claim 17.

5. Claims 9, 10, 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbadhikari et al (US 5,477,264) in view of Steinberg et al (US 6,006,039).

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Regarding claim 19, Sarbadhikari does not teach that the recording medium for storing the programs is also used for storing images. However, as taught by Steinberg, a memory (126) of the digital camera (Fig. 4) is used for storing executable programming codes, incoming configuration data and also image data (see col. 7, lines 14-21).

Therefore, it would have been obvious to one of ordinary skill in the art to store both executable programs and captured image data into one memory device to reduce the complex circuitry and cost of the camera.

Regarding claims 9, 10 & 20, see the analysis of claim 18.

Regarding claims 21-24, see the analysis of claim 18. Furthermore, Steinberg discloses that the memory can be any form of programmable memory, such as RAM, CMOS, etc. (see Steinberg, col. 5, lines 52-58). Although Steinberg does not explicitly disclose the memory being a Flash memory, someone skilled in the art would easily recognize that such a Flash memory is one kind of CMOS based memories. Therefore, it would have been obvious to one of ordinary skill in the art to use a Flash memory as an obvious variation of a CMOS memory for storing programs and image data.

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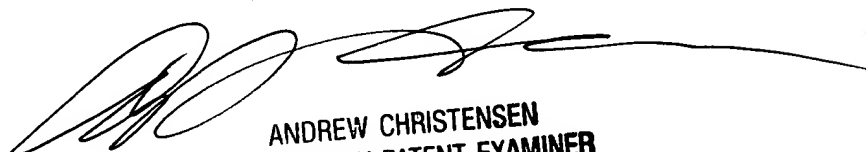
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


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TECHNOLOGY CENTER 2600